

You, Me & SVG!



Level 2

Would You, Could You With a Badge?

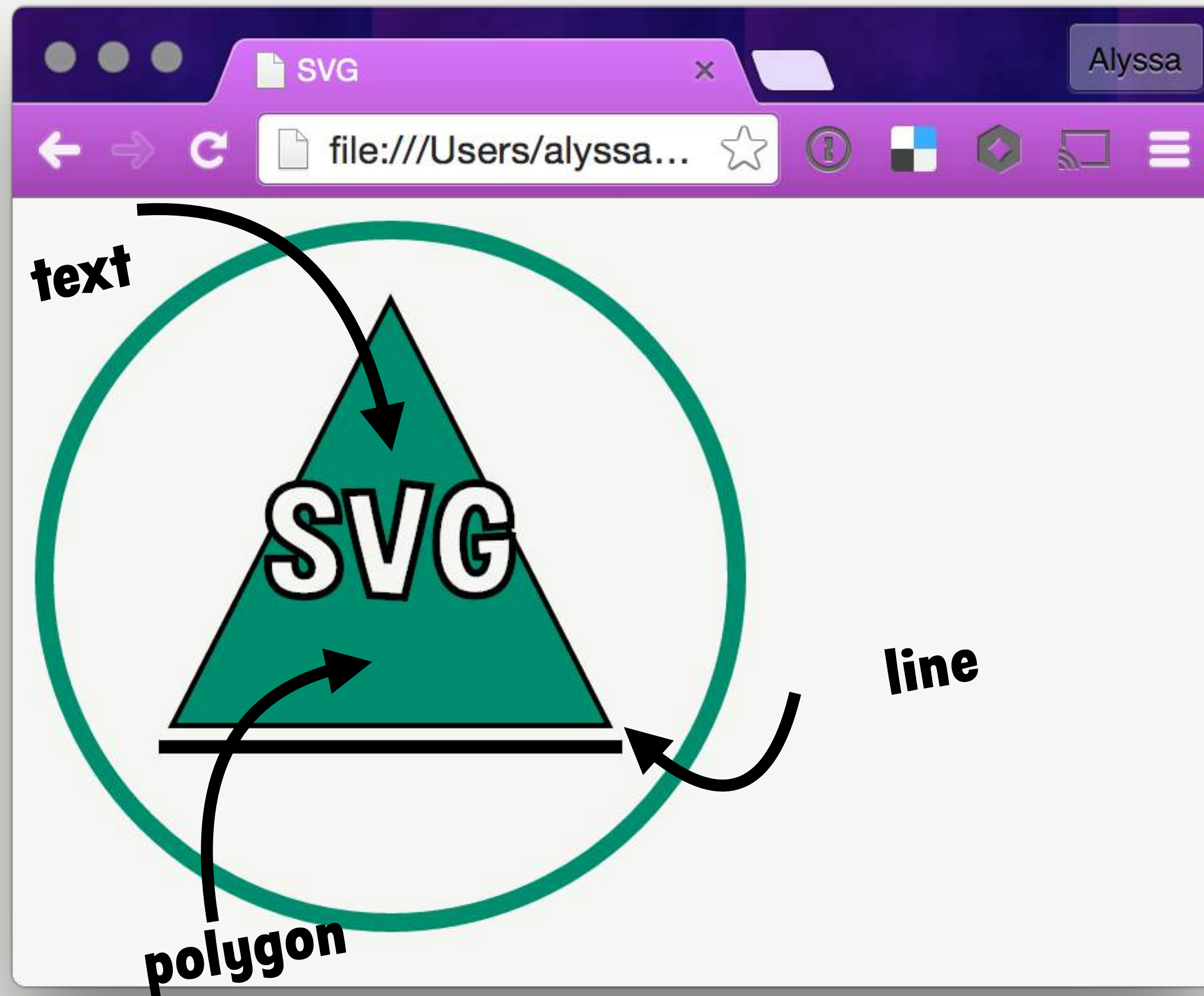
Section 2 – Shapes for You

**You, Me
& SVG!**



Drawing a Fancy Schmancy Badge

We'll need to learn a few more shapes to build this SVG, like text, polygon, and line.



Creating a New SVG Tag

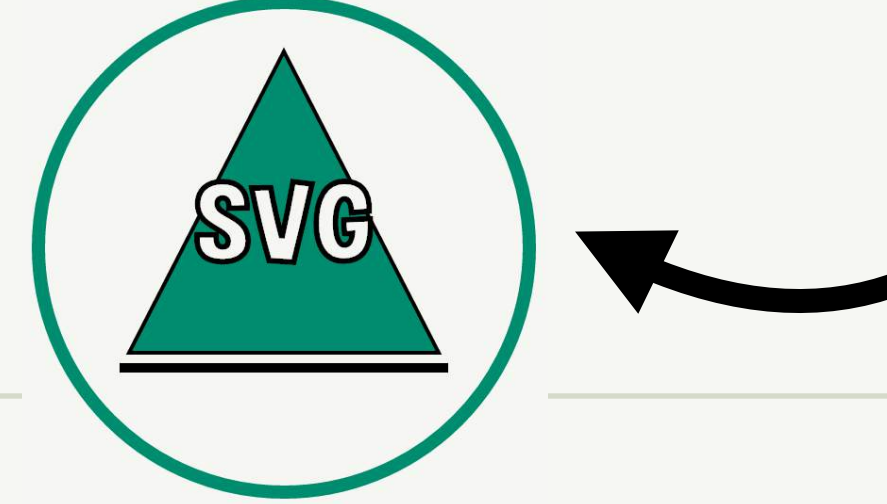
Let's set the viewport size, version, and namespace attributes.

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>SVG</title>
  </head>
  <body>
    <svg height="268"
        width="268"
        version="1.1"
        xmlns="http://www.w3.org/2000/svg">

      </svg>
    </body>
  </html>
```

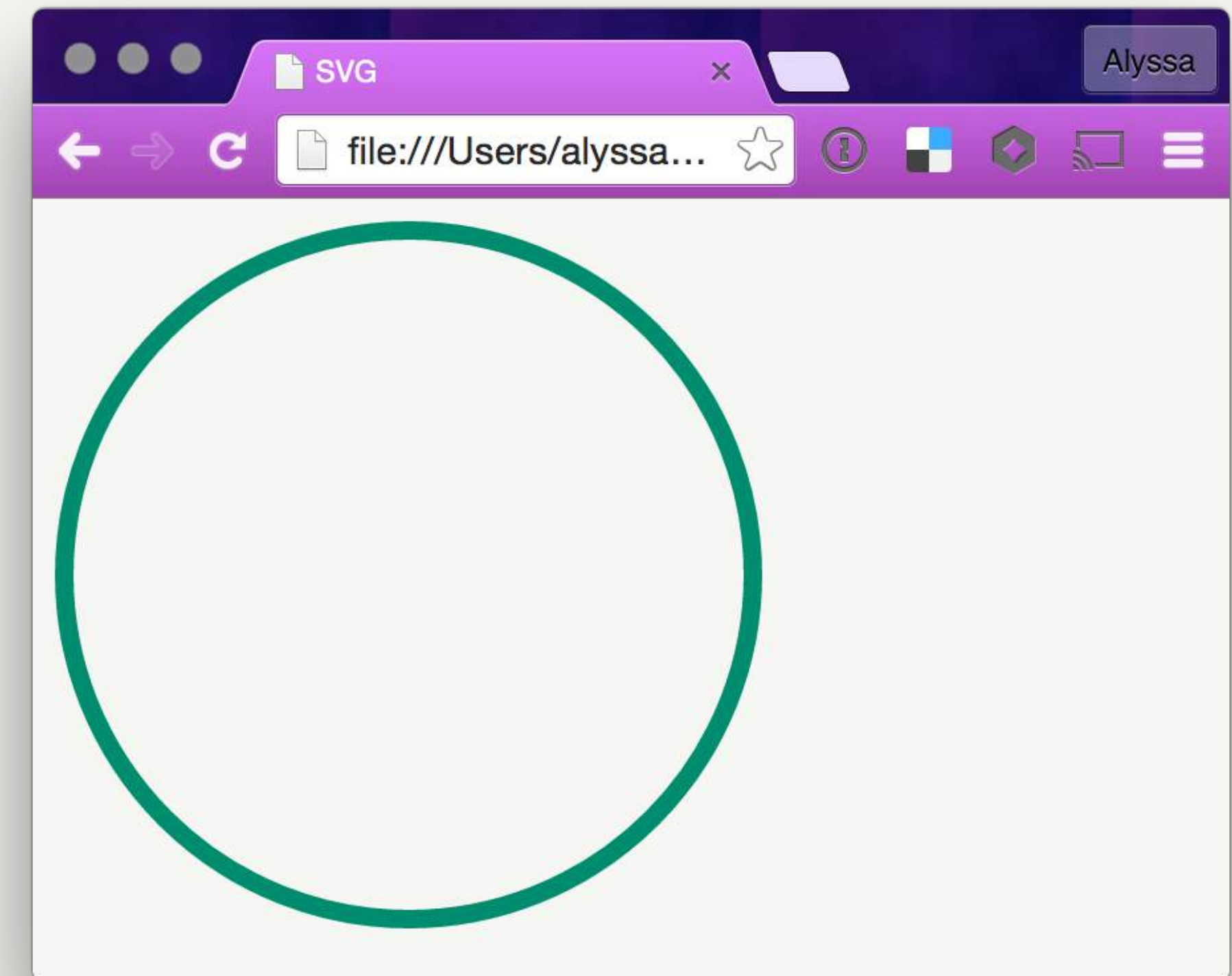
Starting Off With a Circle



Our circle should have a 130 radius, 7px green border, no fill color, and be centered at 134x134.

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>SVG</title>
  </head>
  <body>
    <svg ...>
      <circle r="130" cx="134" cy="134" fill="none"
stroke="#008B6F" stroke-width="7"/>
    </svg>
  </body>
</html>
```



Many of these styles can be separated into a stylesheet.

Using a style.css File

This cleans up our HTML and puts the styles where they belong.

index.html

```
<!DOCTYPE html>
<html>
  <head>...
    <link rel="stylesheet" href="style.css"/>
  </head>
  <body>
    <svg ...>
      <circle r="130" cx="134" cy="134"/>
    </svg>
  </body>
</html>
```

**Anything that sets coordinates,
though, must be inline!**

style.css

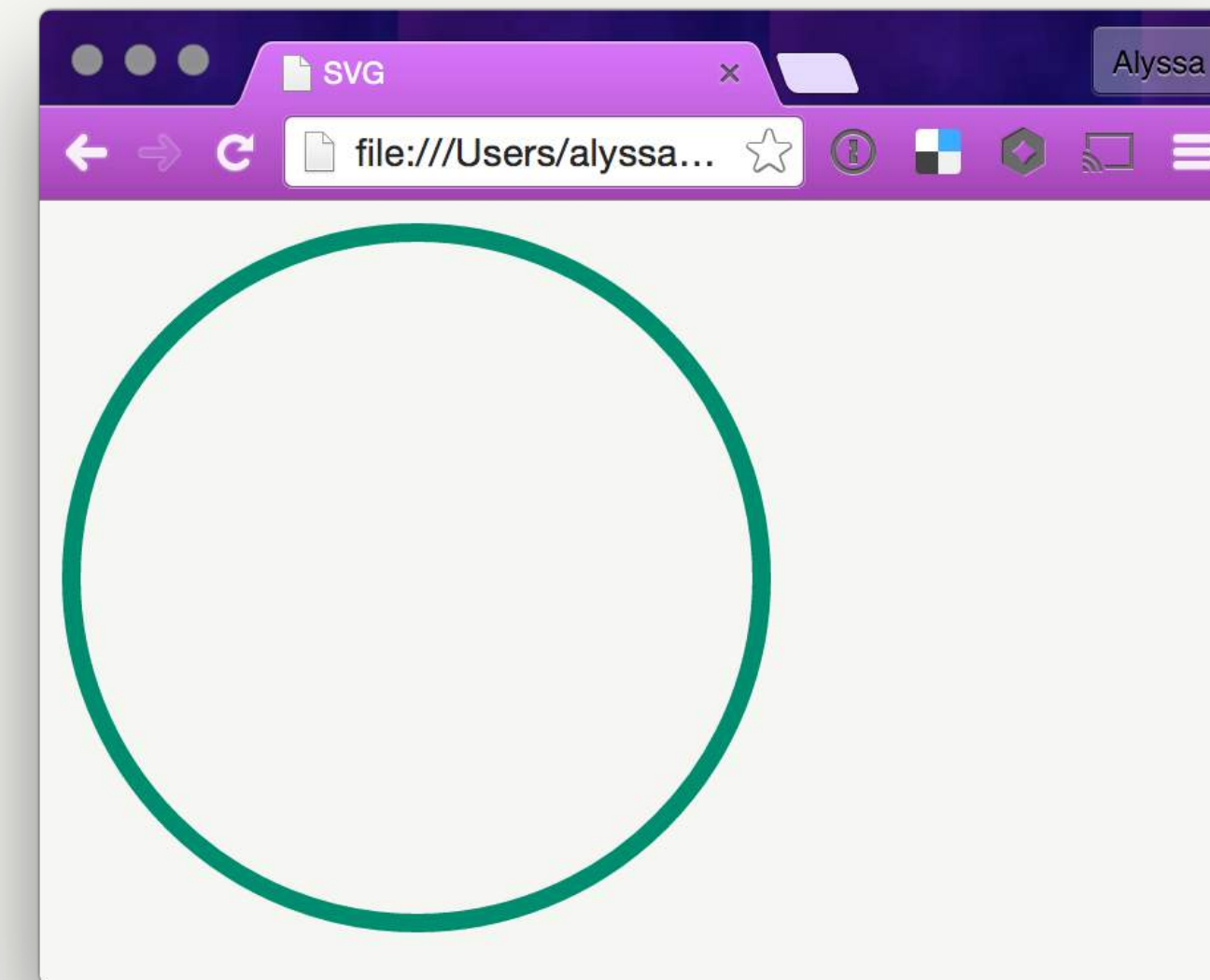
```
circle {
  fill: none;
  stroke: #008B6F;
  stroke-width: 7px;
}
```

**Notice a unit identifier (px) is
required in the CSS file!**

Continuing to Build Our Badge

index.html

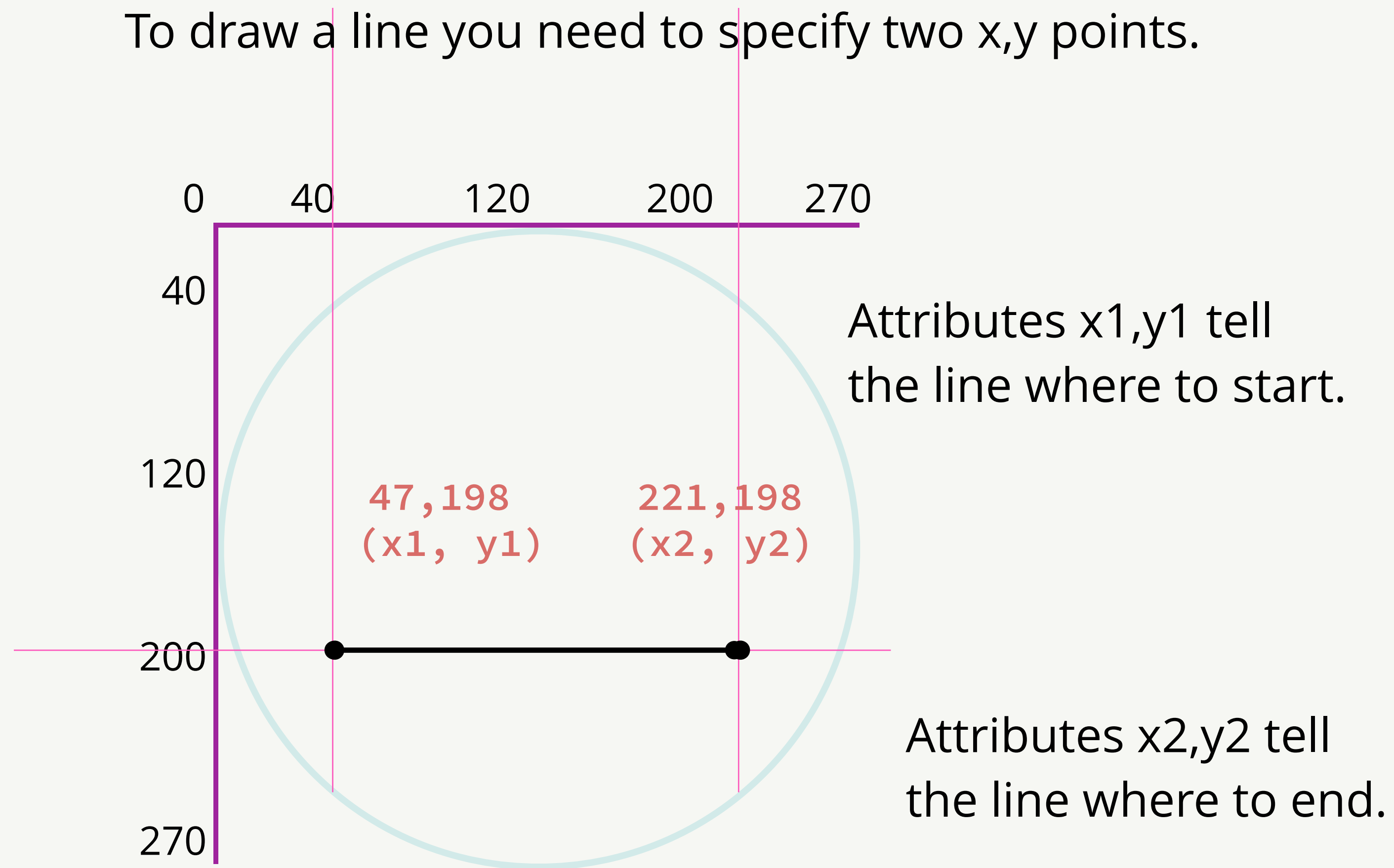
```
<!DOCTYPE html>
<html>
  <head>...
    <link rel="stylesheet" href="style.css"/>
  </head>
  <body>
    <svg ...>
      <circle r="130" cx="134" cy="134"/>
    </svg>
  </body>
</html>
```



Next, draw the line!

Positioning the Line

To draw a line you need to specify two x,y points.



index.html

```
...  
<line x1="47" y1="198" x2="221" y2="198" />
```



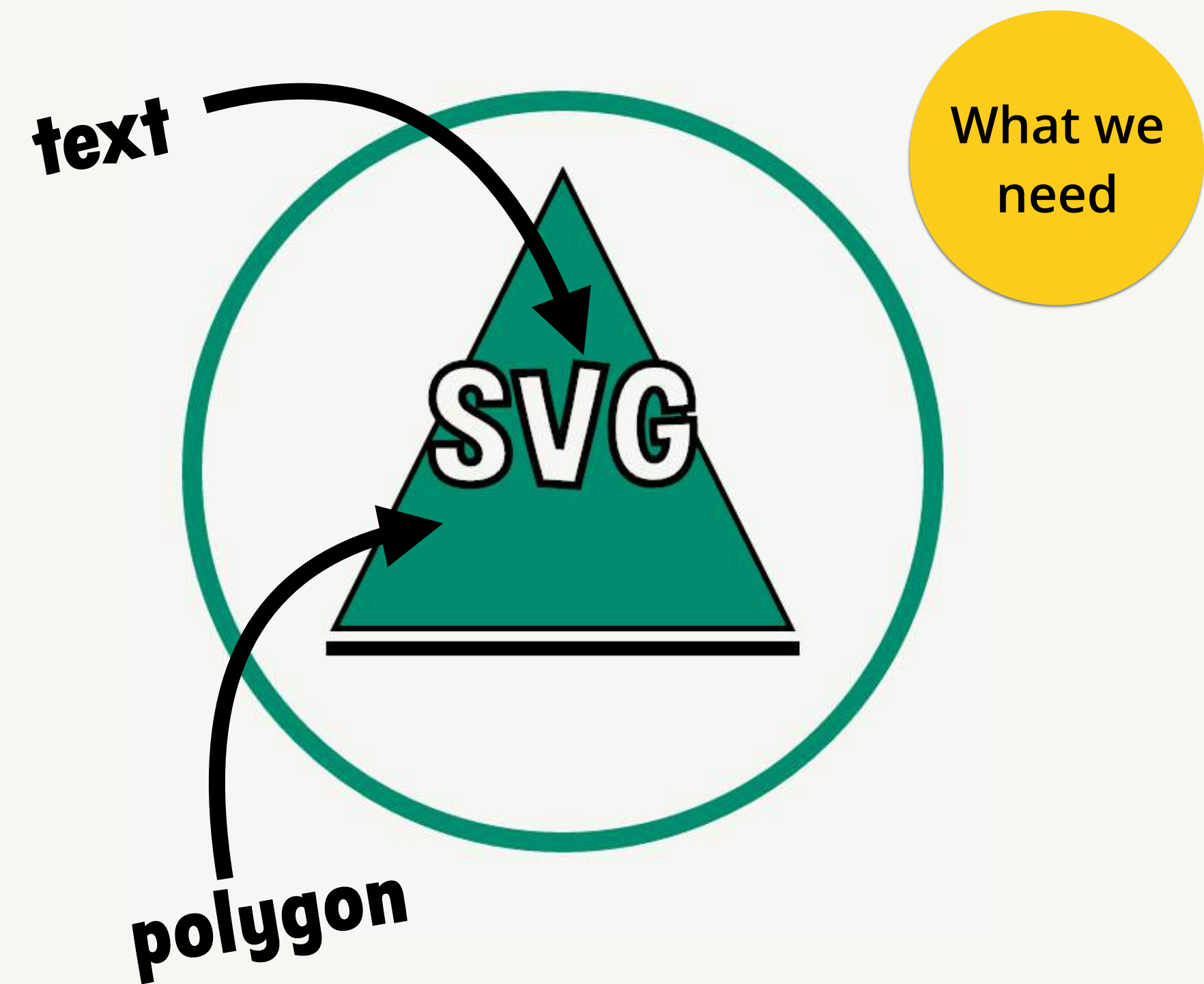
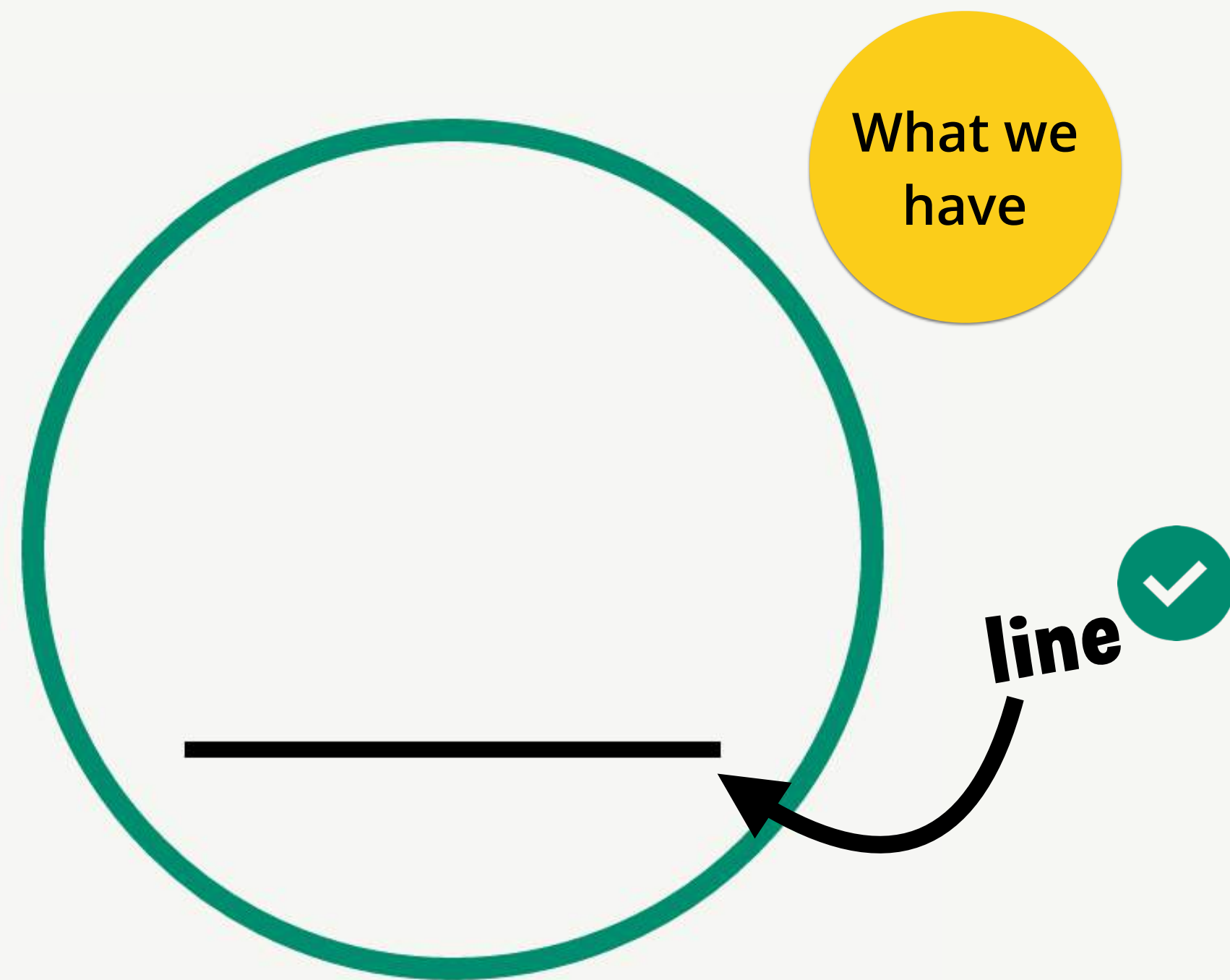
Next, draw the line!

style.css

```
...  
line {  
  stroke: black;  
  stroke-width: 5px;  
}
```


SVG Text Element

We have the line of the badge — now we need the text!



Using the SVG Text Element

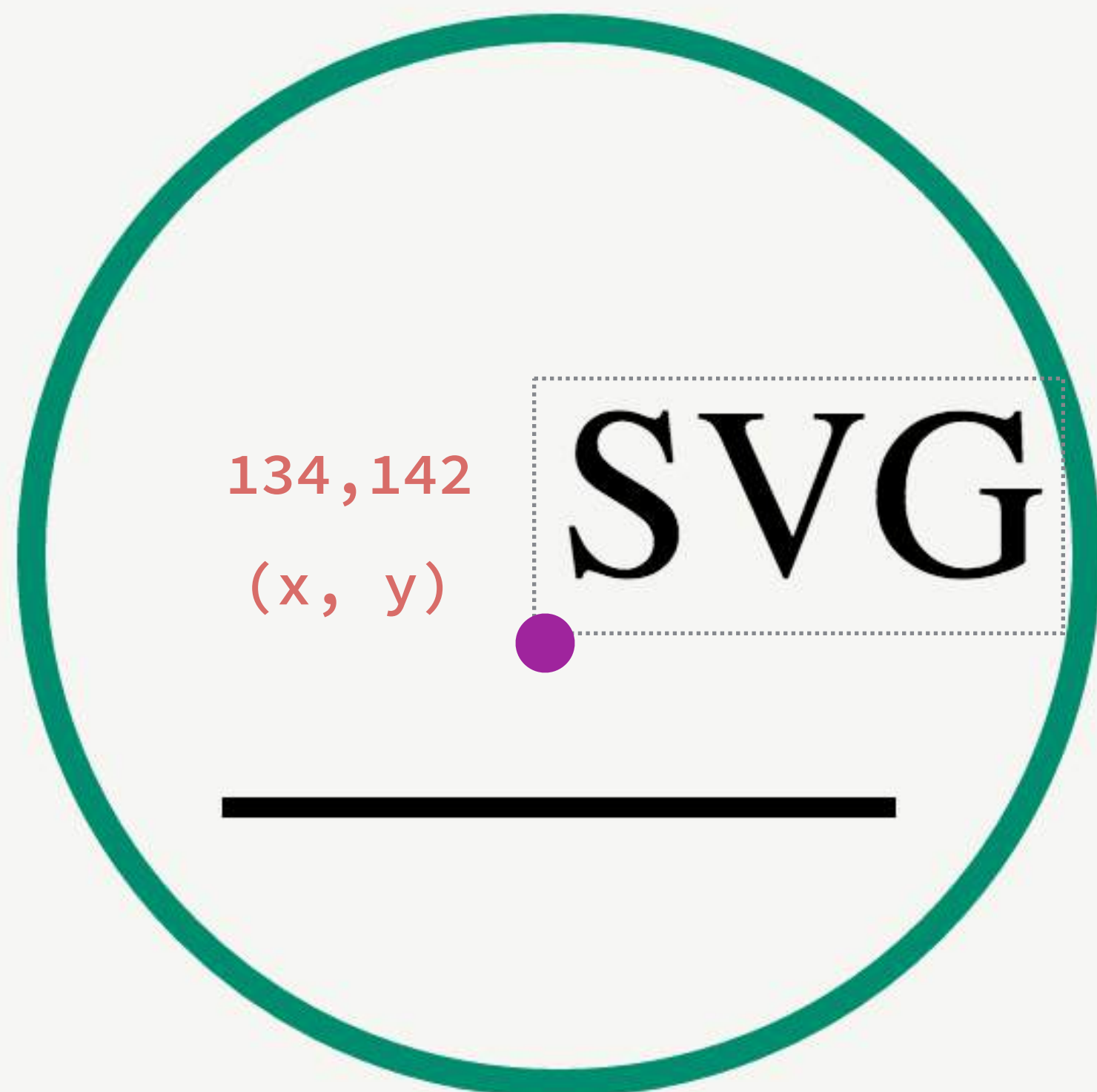
To get text to appear, we need to specify the anchor points and font size.

index.html

```
...  
<text x="134" y="142">SVG</text>
```

style.css

```
text {  
  font-size: 60px;  
}
```



**The default anchor point is
bottom left of the text box.**

Changing the Default Text Anchor

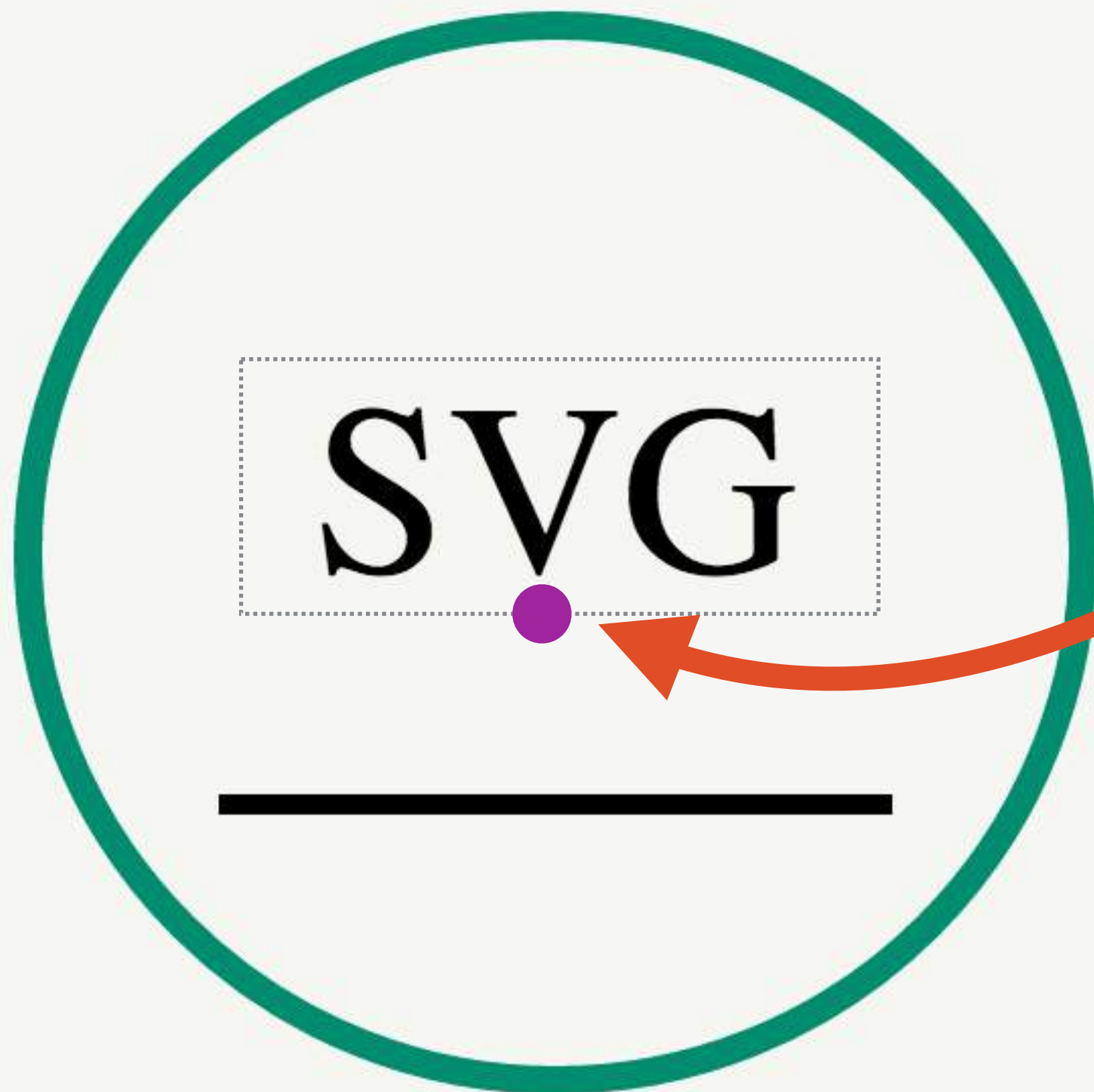
index.html

```
...  
<text x="134" y="142">SVG</text>
```

style.css

```
text {  
  font-size: 60px;  
  text-anchor: middle;  
}
```

Now our text is centered.



Styling Our Text

index.html

...

```
<text x="134" y="142">SVG</text>
```



style.css

```
text {  
  font-size: 60px;  
  text-anchor: middle;  
  font-family : 'FilmoTypeMajor';  
  stroke: #000;  
  stroke-width: 3px;  
  fill: #F6F7F3;  
}
```

setting the font
family

Setting stroke
width and color

Setting the color
of the font

Understanding What Must Be Inline

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <meta charset="utf-8">
    <title>SVG</title>
    <link rel="stylesheet" href="style.css">
  </head>
  <body>
    <svg ...>

      <circle r="130" cx="134" cy="134"/>
      <line x1="47" y1="198" x2="221" y2="198"/>
      <text x="134" y="142">SVG</text>

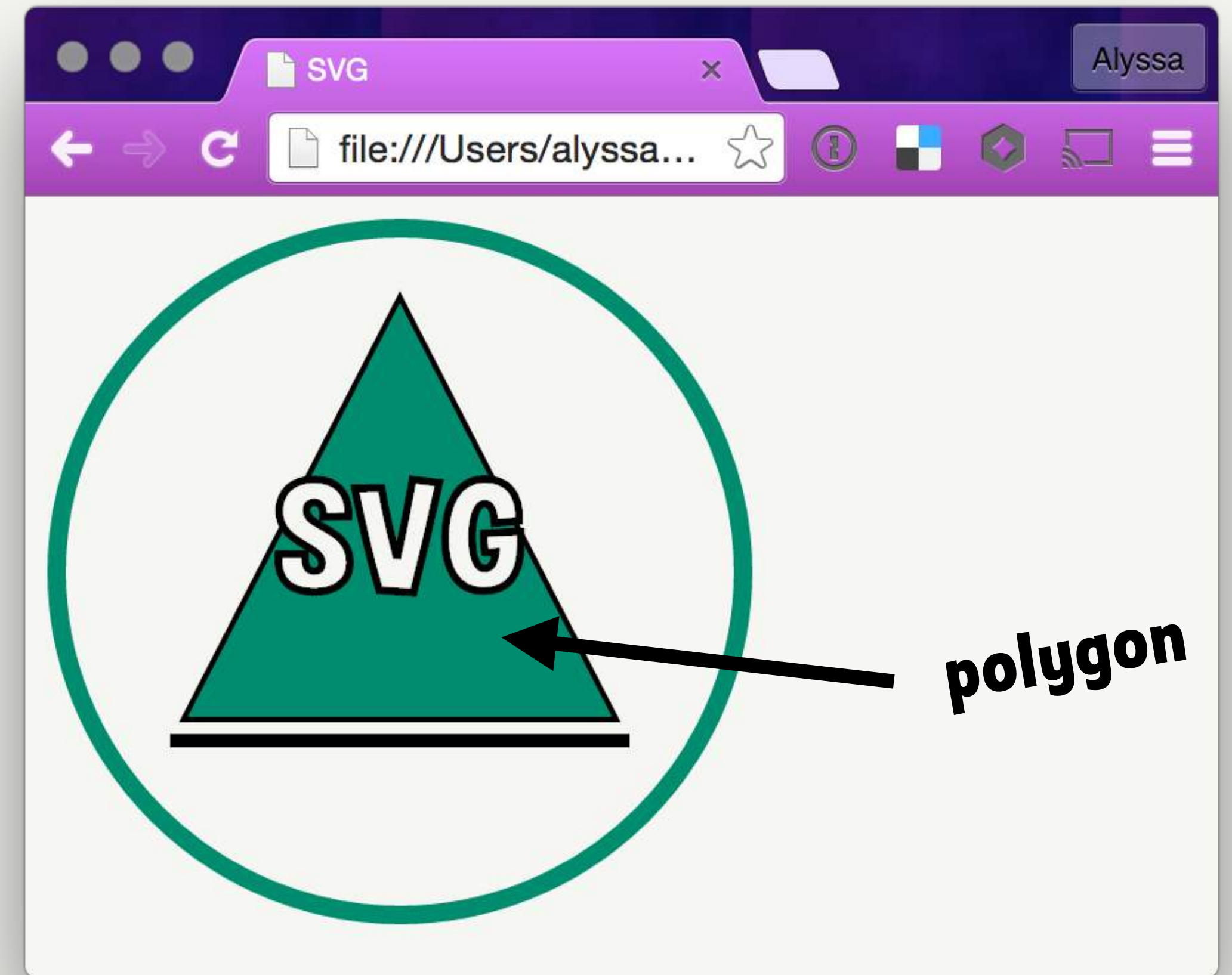
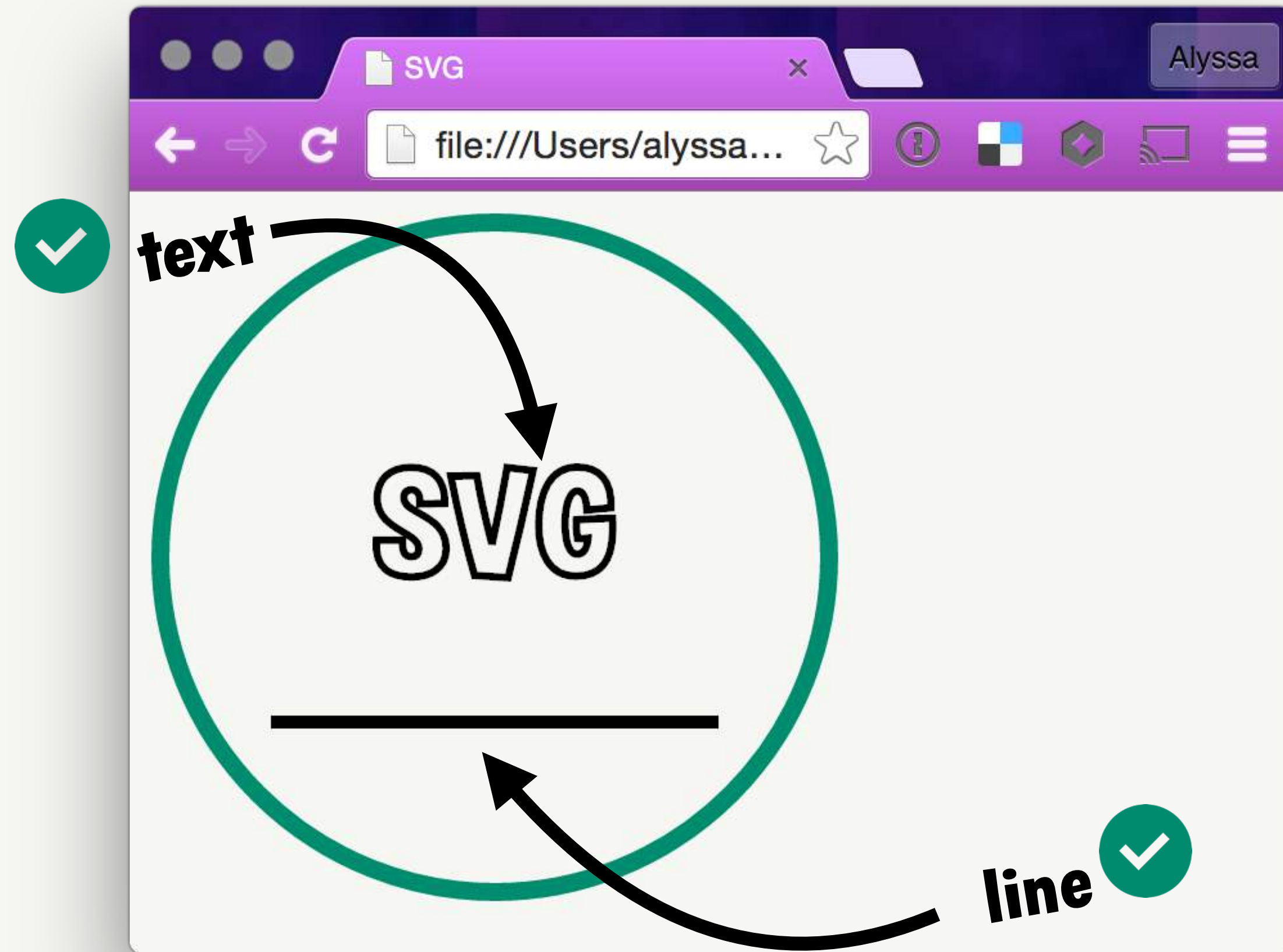
    </svg>
  </body>
</html>
```

**Must be inline –
won't work in CSS**

**Any attribute to do
with coordinates
stays inline!**

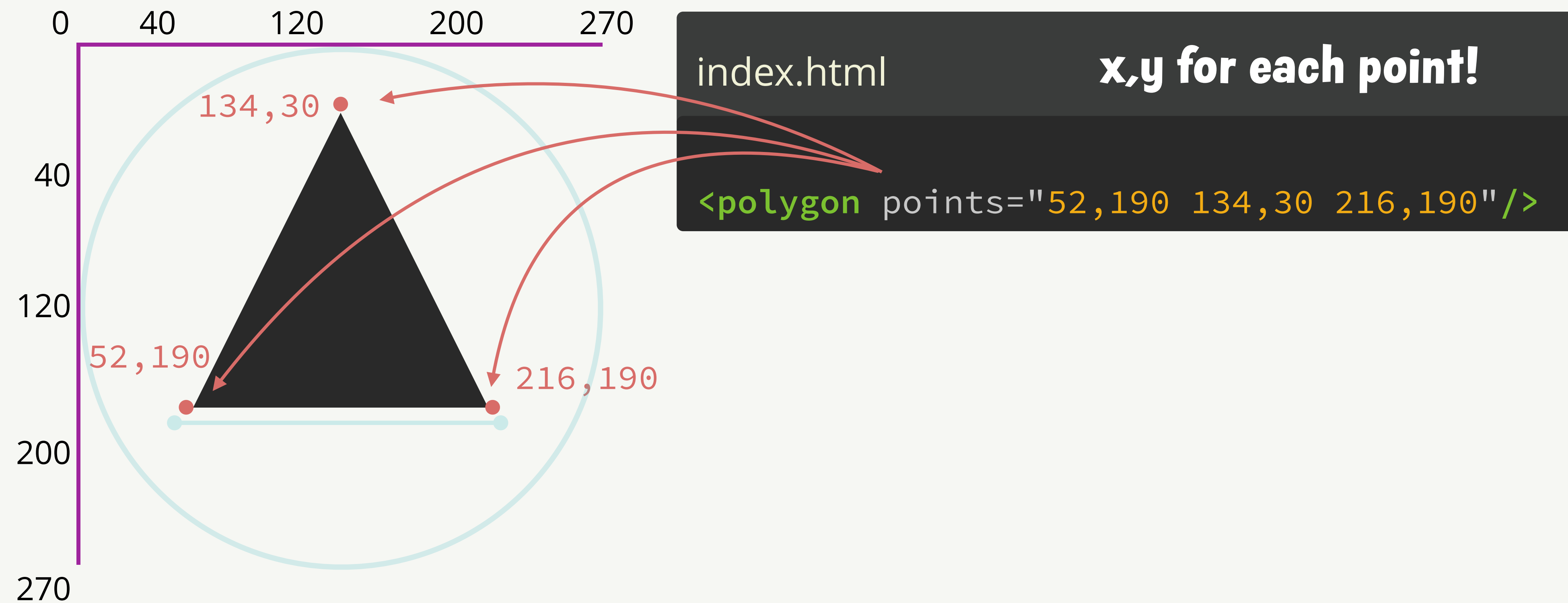
Drawing One Last Shape

All we need now is the triangle in the background!



Introducing the SVG Polygon Element

The SVG <polygon> element is used to draw shapes with multiple (three or more) sides.



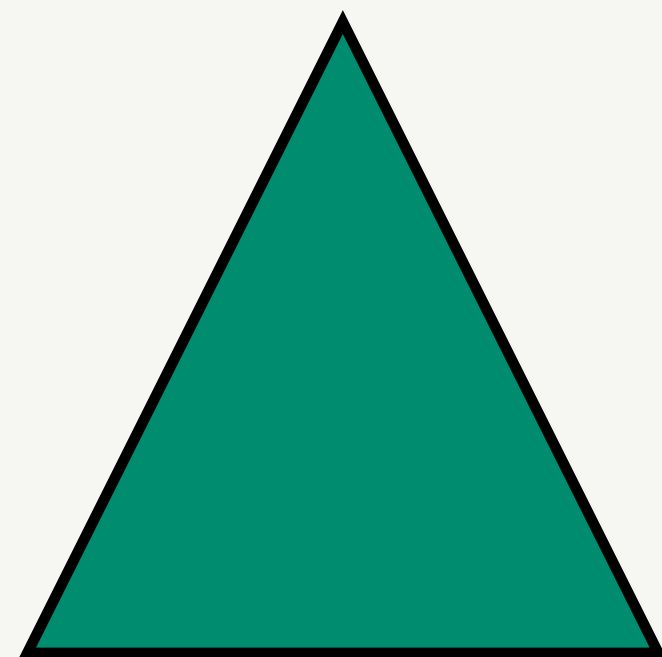
Polygon connects the x,y points to draw the shape and connects the last point to the first point.

Styling Our Polygon

Now inside the stylesheet, we can give the polygon a fill, stroke, and stroke width so it looks as the badge example does.

index.html

```
<polygon points="52,190 134,30 216,190"/>
```



black 2px stroke

style.css

```
...  
polygon {  
  fill: #008B6F;  
  stroke: black;  
  stroke-width: 2px;  
}
```

blue/green fill

Adding the Polygon to Our SVG

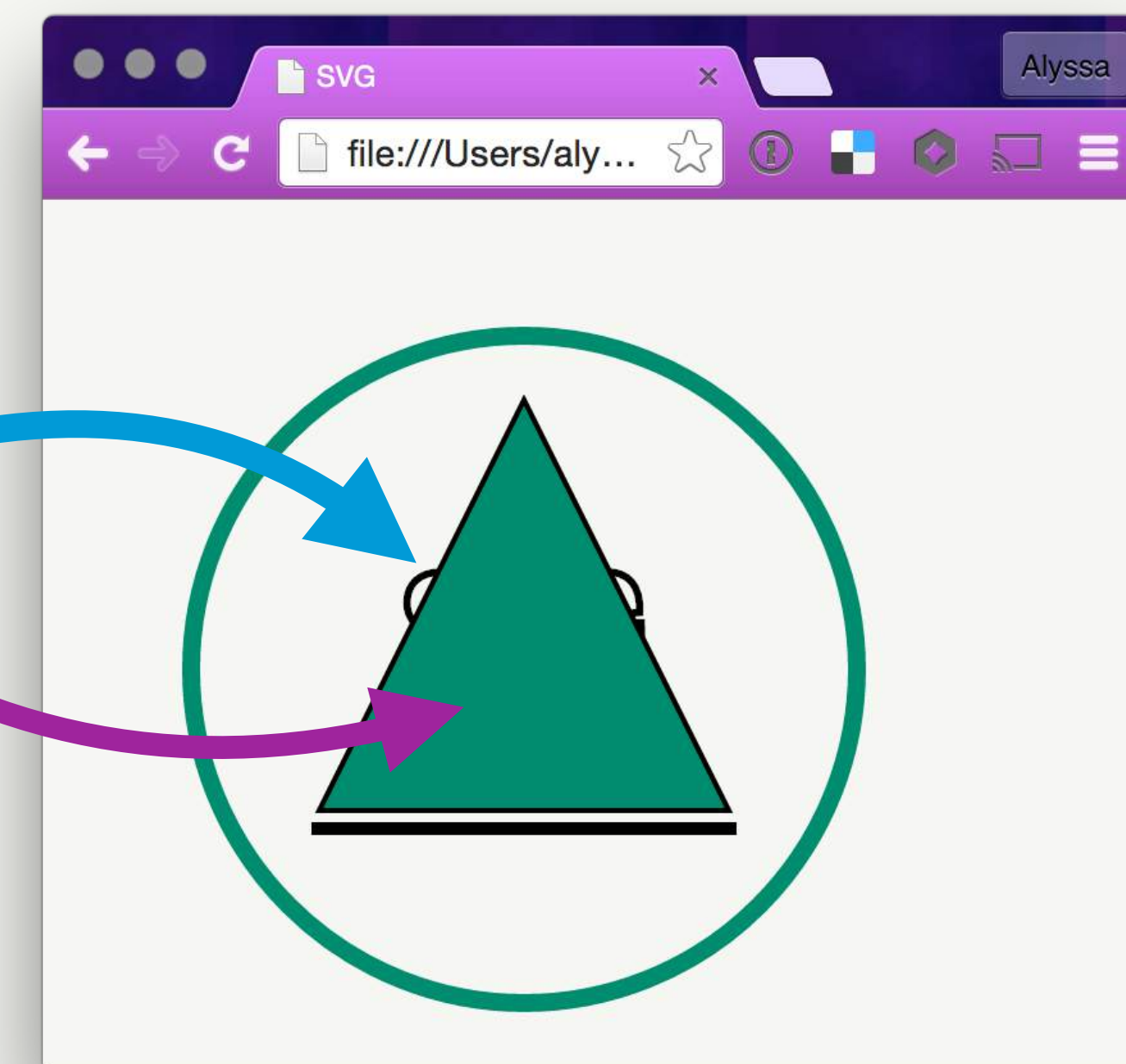
index.html

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <svg ...>

      <circle r="130" cx="134" cy="134"/>
      <line x1="47" y1="198" x2="221" y2="198"/>
      <text x="134" y="142">SVG</text>
      <polygon points="52,190 134,30 216,190"/>

    </svg>
  </body>
</html>
```

What in Schmuffle Land is happening?!



The triangle is plop right on top of our text.

Fixing the Order

For our badge, the polygon needs to go first in the markup so it is drawn first. HTML elements stack this way too!

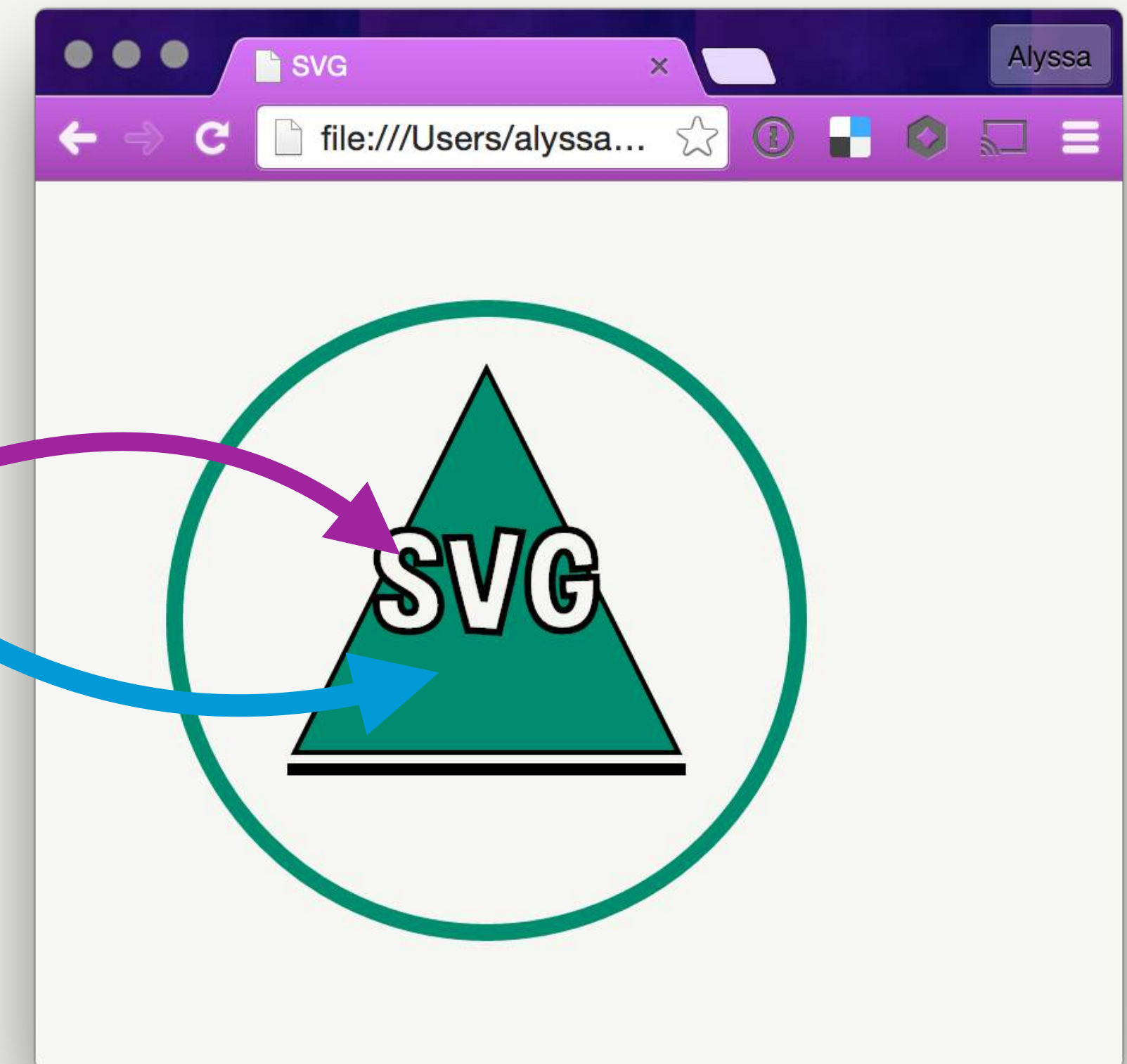
index.html

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <svg ...>

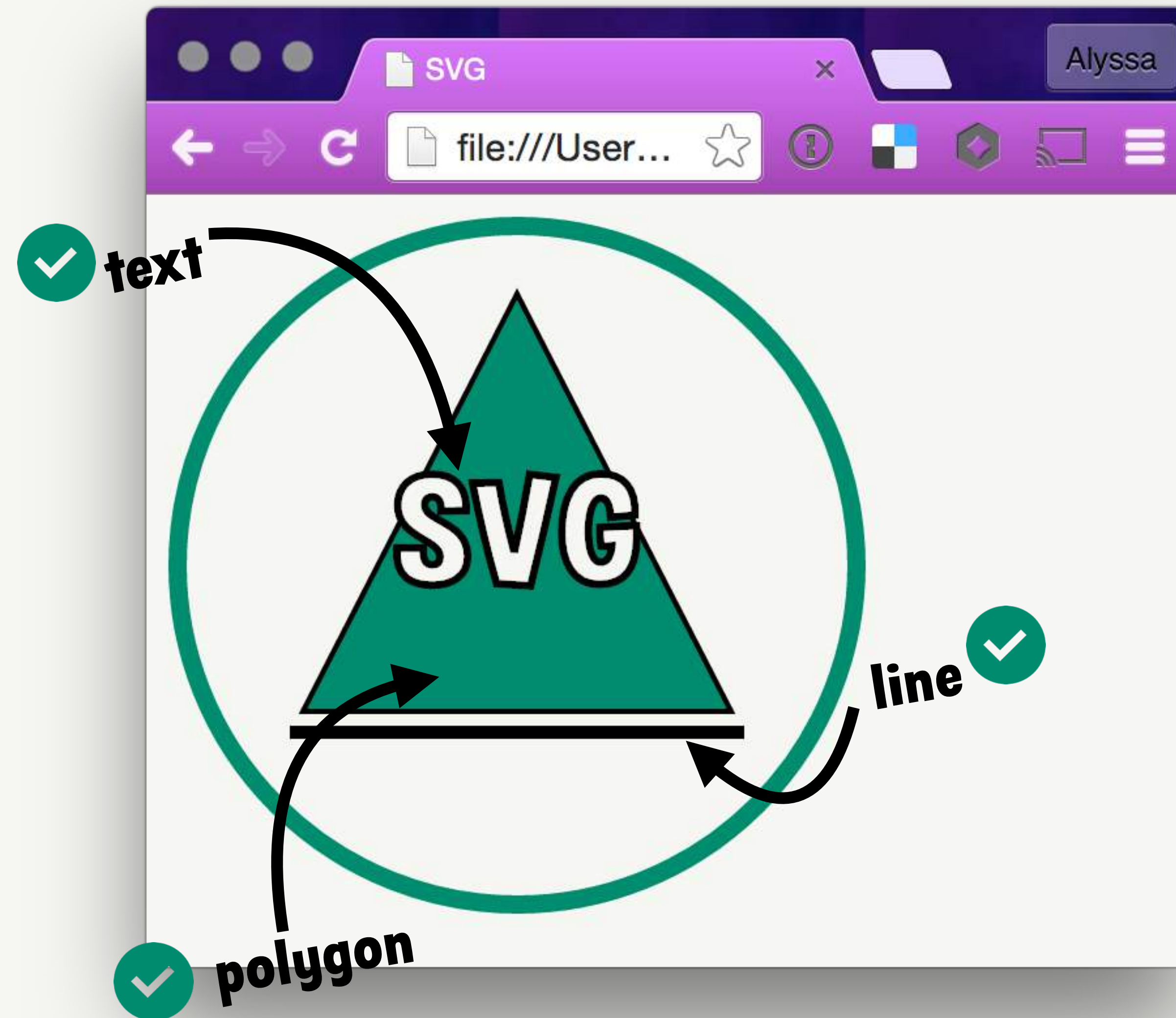
      <circle r="130" cx="134" cy="134"/>
      <line x1="47" y1="198" x2="221" y2="198"/>
      <polygon points="52,190 134,30 216,190"/>
      <text x="134" y="142">SVG</text>

    </svg>
  </body>
</html>
```

Order matters



Finished Icon



Challenges

